

SOBOLEV, A. A.

"The Study of the Geography of Helminths."

report presented at Conference on Dry Land Zoogeography, L'vov, 1-4 June 1957,  
(Izv. Ak Nauk Ser. Geog. 1958, No. 2, pp 155, Author: VORONOV, A. G. ).

SOBOLEV, A. A., MOSTAVKIN, P. A. and NAYANOV, N. I.

"Nematodes of the Scrjabinoclava Sobolev Type as Mallam Parasites,  
and the Nature of Their Pathogenic Effect on the Host."

Tenth Conference on Parasitological Problems and Diseases with Natural  
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of  
Sciences, USSR, Moscow-Leningrad, 1959.

The Far-Eastern State University, Vladivostok

SKRYABIN, Konstantin Ivanovich, akademik; SOBOLEV, Andrey Andreyevich, prof.;  
Prinimal uchastiye IVASHKIN, V.M., doktor veterin.nauk; POPOVA, T.I.,  
red.izd-va; LAUT, V.G., tekhn.red.

[Spirurata of animals and man and the diseases caused by them.  
Part 1. Spiruroidei] (Spiruraty zhivotnykh i cheloveka i  
vyzyvaemye imi zabolevaniia. Pt. 1. Spiruroidei. Moskva, Izd-vo  
Akad. nauk SSSR, Gel'mintologicheskaya laboratoriya. Osnovy  
nematodologii, vol. 11). 1963 (MIRA 16:7)  
(Nematoda)

GUBANOV, Nikolay Mikhaylovich; SOBOLEV, A.A., doktor biol. nauk,  
otv. red.;

[Helminths of commercial mammals of Yakutia] Gel'minto-  
fauna promyslovykh mlekopitaiushchikh I Akutii. Moskva,  
Izd-vo "Nauka," 1964. 142 p. (MIRA 17:6)

SKRYABIN, K.I., akademik; SOBOLEV, A.A., prof.

[Spiruridae of animals and man and the diseases caused by them.  
Part 2. Physalopteroidea.] Spiruraty zhivotnykh i cheloveka i  
vyzyvayemye imi zabolevaniya. Moskva, Izd-vo "Nauka." Pt.2.  
[Physalopteroidea] Fizalopteroidei. 1964. 333 p. (Akademiya  
nauk SSSR. Gel'mintologicheskaya laboratoriya. Osnovy nematodologii,  
vol. 12) (MIRA 17:6)

L 22594-(v) EWT(d)/EWP(k)/EWP(1)

ACC NR: AP6012999

SOURCE CODE: UR/0105/65/000/006/0090/0090

AUTHOR: Alekseyenko, G. V.; Borisenko, N. I.; Voevodin, I. D.; Drozdov, N. G.; Krayz, A. G.; Man'kin, E. A.; Mayorets, A. I.; Nekrasov, A. M.; Nayashkov, I. S.; Pavlenko, A. S.; Rokotyan, S. S.; Sobolev, A. A.; Syromyatnikov, I. A.; Sapozhnikov, A. V.; Sarkisov, M. A.; Chernichkin, D. S.; Chertin, A. M.

ORG: none

TITLE: S. I. Rabinovich (on the occasion of his 60th birthday)

SOURCE: Elektrichestvo, no. 6, 1965, 90

TOPIC TAGS: electric engineering personnel, electric transformer, hydroelectric power plant

ABSTRACT: The chief specialist of transformer building of the Gosplan (State Planning Commission) USSR, Samuil Isaakovich Rabinovich was born in 1905 in the town of Borisoglebsk of the Voronezh Oblast'. From his student years at the Gosudarstvennyy elektromashinostroitel'nyy institut (State Machine-Building Institute) he already showed interest for power transformers. In the early thirties he designed the first types of domestic Soviet 110 and 220 kV transformers; in 1939 he became the chief designer of the Moskovskiy transformatornyy zavod (Moscow Transformer factory). In 1946, he conducted the design and construction of lightning-resistant transformers; during 1949-1954,

Card 1/2

UDC: 621.314(092)

E 22594-66

ACC NR: AP6012999

he headed the design of the 400 kV transformer equipment for the Volzhskaya hydroelectric power station - Moscow power line; his subsequent work on the 500 kV equipment earned him the Lenin prize.<sup>14</sup> From 1960, he has been working at the Gosplan USSR. He is also a member of the editorial board of the journal Elektrichestvo (Electricity). Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10, 09 / SUBM DATE: none

Card 2/2 *See*

PAKHALUYEV, K.M.; KOROLEV, N.M.; ZHURKIN, V.S.; SOBOLEV, A.A.

Experience in the operation of a holding furnace with uncooled  
hearth supports. Stal' 22 no.12:1135-1136 D '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy  
teplotekhniki i zavod "Krasnyy Otktyabr'."  
(Furnaces, Heating)



PAKHALUYEV, K.M.; KUZOVNIKOV, A.A.; NOVIK, G.P.; BORODIN, V.P.; SOBOLEV,  
A.; ZUBKOVA, N.M.

Industrial operation of holding furnaces fired by natural gas  
for direct low-oxidation heating. Stal' 25 no.10:957-961  
O '65. (MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut  
metallurgicheskoy teplotekhniki i zavod "Krasnyy Oktyabr".

A. D. ZOROLEV, V. V. MAZURKEVICH, and L. N. DADUSHKO

"Development of a Procedure for Determining Optimum and Maximum Allowable  
Operating Conditions for the Use of Receiver-Amplifier Tubes in Pulse Circuits"  
From Annotations of Works Completed in 1955 at the State Union Sci. Res. Inst;  
Min. of Radio Engineering Ind.

So: B-3,080,964

KUKEL', A.S.,; SOBOLEV, A.D.

Echinococcus of the fibula. Khirurgiia, no.11:81 N '55. (MLRA 9:6)

1. Iz TSentral'nogo instituta gematologii i perelivaniya krovi.  
(FIBULA--HYDATIDS)

SOBOLEV, A. F.

Dissertation: "Traumata of the Head and Their Effect on the Mineral Composition of the Blood and Spinal Fluid." Cand Med Sci, Tashkent Medical Inst, 30 Jun 54.  
(Pravda Vostoka, Tashkent, 19 Jun 54)

SO: SUM 318, 23 Dec. 1954

SOBOLEV, A.F.

Bullet wound of the radix mesenterii of the small intestine.

Khirurgiia, no.11:84 N '55.

(MLRA 9:6)

1. Iz Chimbayskoy rayonnoy bol'nitsy Karakalpakskoy ASSR.

(~~MESENTERY~~--WOUNDS AND INJURIES)

SOBOLEV, A.F., kand.meditsinskikh nauk

Calculi of the upper biliary tract. Med. zhur. Uzb. no. 1:21-22  
Ja '60. (MIRA 13:8)

1. Iz Syrdar'inskoy rayonnoy bol'nitsy (glavnyy vrach - P.S.  
Yudina) Tashkentskoy oblasti, UzSSR.  
(CALCULI, BILIARY)

SOBOLEV, A.F., - kand.meditsinskikh nauk

Penetrating wound of the left ventricle of the heart. Med. zhur.  
Uzb. no.10:75 0 '60. (MIRA 13:12)

1. Iz khirurgicheskogo otdeleniya Syrdar'inskoy rayonnoy bol'nitsy  
(glavnyy vrach - P.S. Yudina) Tashkentskoy oblasti.  
(HEART--WOUNDS AND INJURIES)

ACC NR: AP6005353 SOURCE CODE: UR/0413/66/000/001/0094/0094

AUTHORS: Sobolev, A. F.; Kuznetsov, A. A.; Yefremov, A. A.

ORG: none

TITLE: Electronic integrator. <sup>16C</sup> Class 42, No. 177646

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 94

TOPIC TAGS: electronic circuit, pulse integrator

ABSTRACT: This Author Certificate presents an electronic continuous signal integrator containing an integrating capacitor. To increase the integration accuracy and the response rate, the signal is fed to the input of the pulse-amplitude converter. The output signals are fed to the input of a pulse-width converter at whose output the integrating storage capacitor is connected (see Fig. 1).

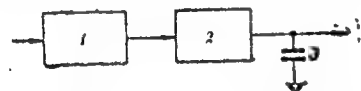


Fig. 1. 1 - pulse-amplitude converter;  
2 - pulse-width converter; 3 - capacitor

Orig. art. has: 1 diagram.

SUB CODE: 09/ SUBM DATE: 14Aug64

UDC: 681.142.334

Card 1/1



SOBOLEV, A.I.

"Problem of Transient Processes in Long Lines" Sb. Nauvkh. Rabot  
Belorus. Politekhn. In-ta, No 46, 1954, 36-41

The coupling effect is analysed of a uniform, long line  
shortcircuited at the end of the voltage  $u = F(t) - U_0(1 - e^{-\gamma t})$ , where  
is the coefficient of voltage rise. The telegraph equation of the problem  
is solved by Fourier's method, taking the initial and boundary conditions  
under consideration. The determination of integration constants involves  
difficulties, due to heterogenous boundary conditions. An example of  
computation is given. (RZhFiz, No 11, 1955)

~~SECRET~~  
SOBOLEV, ANATOLIY I.  
AUTHORS:

Call Nr: AF 1149769  
Nesterenko, Gennadiy Nikolayevich, Sobolev, Anatoliy Ivanovich, Sushkov, Iuriy Nikolayevich.

TITLE:

Use of atomic engines in aviation (Primeneniye atomnykh dvigateley v aviatsii).

PUB. DATA:

Voyennoye Izdatel'stvo Ministerstva Oborony Soyuza SSR, Moscow, 1957, 166 pp. (Series: Nauchno-Populyarnaya Biblioteka)

EDITOR:

Mikhaylov, V. A., Candidate of Phys.-Math. Sciences, Eng.-Col.; Pokrovskiy, G. I., consultant, Prof., Dr. of Techn. Sciences, Brig.Gen. of Eng.-Tech. Service; Novikov, M. L., consultant, Dr. of Tech. Sciences, Eng.-Col.; Tech. Ed.: Strel'nikova, M. A.; Reviser: Tsvetkova, L. K.; Ed.: Kader, Ya. M.

PURPOSE:

The purpose of this pamphlet is to give a systematic review of the information<sup>in</sup> existing literature on the use of atomic energy in aviation and rocketry. The popular presentation should make it accessible to the juvenile reader.

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Call Nr: AF 1149769

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AVAILABLE: Library of Congress

Card 6/6

SOBOLEV, Andrey Ivanovich; STARCHAKOVA, I.I., red.; BABICHEVA, V.V.,  
tekhn.red.

[Trade in Leningrad; practices of retail organizations] Torgovlia  
v Leningrade; iz opyta raboty roznichnykh togovykh organizatsii.  
Moskva, Gos.izd-vo tovg.lit-ry. 1958. 114 p. (MIRA 12:4)  
(Leningrad--Retail trade)

KHUTSKIY, A.I.; LEONKOV, A.M.; GEYLER, L.B.; SLIPYAN, Ya.Yu.; MOSEYEV, I.V.;  
SOBOLEV, A.I.; TINYAKOV, N.A.; VOIKOV, N.P.; BOTVINNIK, Ya.Ye.;  
BARABANOV, M.Ye.; BRAZGOVKA, V.A.; PEKELIS, G.B.; KUZOVNIKOVA,  
Ye.A.; KUZ'MIN, Yu.P.; SHIMKO, N.I.; PALLADIY, N.L.; KHUTSKIY, G.I.

G.I. Dobkin; obituary. Izv. vys. ucheb. zav.; energ. no.4:128 Ap '58.  
(Dobkin, Grigori Izrailevich, 1892-1958) (MIRA 11:6)

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31933  
S/123/61/000/022/C 10/024  
AOC4/A101

AUTHORS: Pevzner, M.L., Sobolev, A.I.

TITLE: Investigating the possibilities of intensifying the process of lustrous nickel plating by ultrasonics

PERIODICAL: Referativnyy zhurnal. Mashinostroyeniye, no. 22, 1961, 72, abstract 22B441 ("Tr. Proyechn., tekhnol. i n.-i. inta Gor'kovsk. sovnarkhoz", 1959, no. 1, 6 - 21)

TEXT: The authors present the results of investigations carried out at the Gor'kovskiy avtozavod (Gor'kiy Automobile Plant) to find out the possibilities of a practical application of ultrasonics for the intensification of metal-plating processes in baths of semi-industrial and industrial volumes. In the investigation process problems of producing a tube generator and an emitter system intended for protracted operation in the electrolyte were solved. The nickel magnetostrictive H3J-4 (NEL-4) converter with an emitting surface of  $80 \times 85 \text{ mm}^2$  and a resonance frequency of 21.3 kilocycles was used as converter. To protect the converter from cavitation a special jacket was designed which was covered by a thin diaphragm on the emission side. Cooling water pressure and consumption in the

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A004/A101

Investigating the possibilities ...

emitter were determined experimentally. At an intensity of the ultrasonic oscillations of  $3 \text{ w/cm}^2$ , the pressure was selected equal to 5 atm, and at an intensity of  $7 \text{ w/cm}^2$  it was 10 atm. A pressure of 5 atm was selected for operation; in this case the converter surface was not destroyed by cavitation. For supplying the magnetostrictive converter the GYM -2 M (GUM-2M) generator has been developed, which in the course of the operation process was modernized. To carry out the research work concerning the application of ultrasonics in metal-plating processes a special experimental production division was established including preparation, washing, nickel-plating, chrome-plating and copper-plating baths, a special generator building, a 12 v, 2,500 amp d-c generator, individual cabling to the bath coils via the thermocontroller valve, h-f voltage cabling to the emitters on all baths, hydraulic emitter cooling system. Two GUM-2M generators were mounted in a special building where the control of the electric equipment of the whole section was centralized. The works were carried in baths of 7 (glass), 70, 500, 600 and 1,200 liters, lined with vinyl plastic. It is shown that the criterion of the effect of ultrasonics on the metal-plating process is the power density (approximate). At a power density of  $7.6 \text{ w/l}$  the admissible current density is  $15-20 \text{ amp/dm}^2$ , at  $1.3 \text{ w/l}$  it is  $8-10 \text{ amp/dm}^2$ . As a result of the investigations carried out the optimum emitter position was selected, and

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A004/A101

Investigating the possibilities ...

electrolyte and plating conditions in baths of 7, 70, 600, and 1,200 liters have been developed. For big bath volumes (1,200 l) and low power densities the following electrolyte composition is suggested (in g/l):  $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$  - 200-300,  $\text{NaCl}$  - 20-46,  $\text{H}_3\text{BO}_3$  - 25-30, sodium naphthalene disulfonate 2.6-27.0, 25-0.8, pH 4.5-5.4. The following conditions were used: power density - 1.0-3 w/liter, temperature - 45-55°C, current density - 9-12 amp/dm<sup>2</sup>, plating time - 12 min, yield according to current - 96-98, plating thickness - 20  $\mu$ . There are 9 references.

N. Savina

[Abstracter's note: Complete translation]

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A004/A101

Nickel-plating of large-size parts ...

and acoustic factors on this specific defect. It is shown that the presence of chlorions and naphthalene disulfonate in the electrolyte composition promotes the origination of this specific defect. An important part in its origination is also played by the direction of the ultrasonic waves. The author states a hypothesis on the nature of the mentioned specific defect. He investigated the effect of adding the surface-active ОП-7 (OP-7) and ОП-10 (OP10) substances to eliminate this defect. If the mentioned substances are added in the form of an aqueous solution of a concentration of 0.1 g/liter produced as a distillate at 60°C, it is possible to obtain a good-quality coating without the specific defect during nickel-plating according to the approved conditions. The following electrolyte is recommended: nickel sulfate up to 350 g/l, naphthalene disulfonate - 0.2-0.8 g/l, formalin - 2-5 millimeter/liter, sodium chloride - up to 40 g/l, pH - 4.6-5.5; admissible cathode current density preventing scorching - 10 amp/dm<sup>2</sup>. During operation with the Y3T-10 (UZT-10) generator the magnitude of acoustic capacity can be controlled by changing the anode voltage on the generator tube. The following conditions are suggested: 1) electric power - 6 kw, cathode current density D<sub>c</sub> - 6 amp/dm<sup>2</sup>, temperature - 52°C, duration - 17 minutes to obtain a coating of 20 μ. 2) electric power - 6 kw, cathode current density D<sub>c</sub> = 8 amp/dm<sup>2</sup>, temperature - 54°C, in this case the nickel-plating process is more economical (the bath output exceeds the standard one by a factor of 2), the

Ca

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... ..

oil mixed with sulfur and used as coating oil  
for the same; used ultrasonic waves. (Refugee, 1961, p. 3)  
(DINA 1845)

Figure 1. The effect of the concentration of the *Agrobacterium* strain on the transformation efficiency of *Agrobacterium* strain.

L 52614-65 EWT(1)/EWT(m)/EPF(c)/T/EWP(k) Pf-4/Pr-4/Pi-4 DJ

ACCESSION NR: AP5009997

UR/0318/65/000/003/0020/0024

AUTHORS: Ayzenshtayn, P. G.; Bulatova, I. N.; Sobolev, A. I.

TITLE: Production of sulfofresol with ultrasonics

SOURCE: Neftepererabotka i neftekhimiya, no. 3, 1965, 20-24

TOPIC TAGS: ultrasonics, lubricant, coolant, organic synthesis

ABSTRACT: Sulfofresol is one of the most important lubricant-coolant fluids used in the treatment of metals. The chief supplier is the Gor'kovskiy neftemaslozavod im. 26 Bakinskikh komissarov (Gorkiy Petroleum-oil Plant). The technology for producing it was set up in 1935 and has remained essentially unchanged. Sulfofresol is obtained by mixing medium-viscosity mineral oils with a so-called sulfured base at 110-120C. It is produced in nigrol heated to 120C with addition of elemental sulfur during careful stirring. The temperature in the vat is then raised to 165C, and this temperature is held for 10-12 hours. The process is long and tedious, so to simplify the production of sulfofresol the authors investigated the possibility of using ultrasonics. An ultrasonic head was submerged in a column of the liquid mix and hydrodynamic currents were generated by means of a disk. The general procedure was to dissolve elemental sulfur (10-12%)

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ACCESSION NR: AP5009997

in nigrol at 130C, with careful stirring. After complete solution, the nigrol and dissolved sulfur were mixed with distillate, heated to 130C again, and subjected to ultrasonic radiation. High-quality sulfofresol was obtained in this way. Samples were obtained at different periods of ultrasonic radiation, and the properties of the resulting material were determined. All tests indicate that the sulfofresol obtained by the new technique has cutting-coolant properties equivalent to that obtained by the old, and the stability is equally good. Orig. art. has: 3 figures and 4 tables.

ASSOCIATION: Gor'kovskiy neftemaslozavod im. 26 Bakinskikh komissarov (Gorkiy Petroleum-Oil Plant)

SUBMITTED: 00

ENCL: 00

SUB CODE: FE, MM, ??

NO REF SOV: 000

OTHER: 000

282  
Card 2/2

ACC NR: AP7009066 SOURCE CODE: UR/0413/67/000/003/0039/0039

INVENTOR: Sobolev, A. I.; Modestov, L. A.; Kotov, Yu. A.

ORG: None

TITLE: An SHF frequency divider. Class 21, No. 190943

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1967, 39

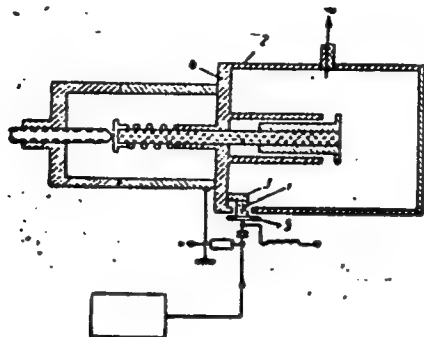
TOPIC TAGS: SHF, frequency divider, semiconductor diode, resonator

ABSTRACT: This Author's Certificate introduces an SHF frequency divider based on a parametric diode and coaxial resonator. To increase the multiplication factor with isolation of the working harmonic and simultaneous suppression of other harmonics, the parametric diode is adjusted for partial triggering of the PN junction and connected at the antinode of the current from a high-Q resonator, connected through a coupling element to the short-circuited wall of this resonator and shunted by a capacitor.

UDC; 621.375.93

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ACC NR: AP7009066



1—parametric diode; 2—resonator; 3—coupling element; 4—resonator wall; 5—structural capacitance

SUB CODE: 09/ SUBM DATE: 10Dec65

Card 2/2

SOBOLEV, A.I., kand.tekhn.nauk, dotsent; KASPEROVICH, A.S., kand.tekhn.nauk;  
STANISHEVSKIY, V.N., inzh.

Concerning P.M.Vaintrub's article "Generalized interpretation of the  
principal relationships in an oscillatory circuit." Izv.vys.ucheb.  
zav.; energ. 5 no.5:123-124 My '62. (MIRA 15:5)

1. Kafedra elektrotekhniki Belorusskogo politekhnicheskogo  
instituta (for Sobolev). 2. Energeticheskiy institut AN BSSR (for  
Kasperovich, Stanishevskiy).  
(Electric circuits) (Electric networks)



S/136/62/000/003/002/008  
E194/E435

18.3100

AUTHOR: Sobolev, A.L.

TITLE: A method of continuously measuring and recording  
back emf

PERIODICAL: Tsvetnyye metally, no.3, 1962, 53-55

TEXT: In the electrolytic refining of metals a knowledge and continuous control of the decomposition voltage, or back-emf, is most important. Existing methods of determining the back-emf are discontinuous, require interruption of the process and are rather inaccurate. Accordingly, the author, O.N.Malkov, A.I.Surakov and V.A.Pronin have developed a method of continuously measuring and recording the back-emf of a laboratory electrolytic cell without disturbing the process (Author's certificate no.131420, priority date December 3, 1959). In the case of pure direct current, the voltage on the electrodes of an electrolytic cell may be written as follows:

$$U = IR + E$$

where U - the voltage on the electrodes, V; I - the current, A;  
R - resistance of the electrolytic cell, ohms; E - back-emf, V.  
Card 1/3

A method of continuously ...

S/136/62/000/003/002/008  
E194/E435

The multiplication and division units take the form of an electromechanical compensation circuit, whilst the subtracting device consists of an electronic differential amplifier. The computer output signal is applied to a recording voltmeter. In a prototype equipment, the error was not greater than  $\pm 5\%$  and mainly depended on the accuracy of the recording instrument and on the linearity and stability of the amplifier characteristics. There are 2 figures.

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Infrared polarization microscope

S/032/62/028/006/024/025  
B117/B101

eye through a tubus and be recorded on photographic plates by means of an accessory photographic device. Long period tests of this microscope showed that its resolving power at 50 magnification is sufficient for observing and photographing 3-4 mm thickness of silicon monocrystal plates under ordinary as well as polarized infrared light. Electron-optical multistage transformers of higher sensitivity must be used for investigating thicker plates. There is 1 figure.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut  
redkometallicheskoj promyshlennosti (State Scientific Research  
Institute of the Rare Metals Industry)

Card 2/2

ACC NR: AP6034236

(N)

SOURCE CODE: UR/0120/66/000/005/0166/0170

AUTHOR: Sobolev, A. L.

ORG: State Scientific Research and Design Institute of the Rare Metal Industry, Moscow  
(Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskey  
promyshlennosti)

TITLE: Individual counting of microscopic objects with print-out of the data

SOURCE: Pribery i tekhnika eksperimenta, no. 5, 1966, 166-170

TOPIC TAGS: optic scanning, microscope, coincidence counting

ABSTRACT: The author analyzes the sources of error in the operation of an automatic microscope television scanner with a print-out mechanism, used for the detection of microscopic imperfections in semiconductors. In this scanner, a vidicon is used to scan the image of the sample located on an automatically driven stage. A typewriter carriage is synchronized to move with the scan and to print out in alphanumeric form, the density information passed from an image analyzer in the corresponding area of the paper. Thus, graphic and numeric data are combined to form a map-like representation of the sample. A pulse-width discriminator circuit makes use of pulse coincidence techniques, utilizing a delay line to select only pulses corresponding to scan intersects of a given width. The author shows that the intersects along a scan line occur in accord-

UDC: 621.374.32:5

Card 1/2

ACCESSION NR: AP4018388

S/0120/64/000/001/0183/0186

AUTHOR: Sobolev, A. L.; Sokurenko, Yu. V.

TITLE: Automatic counting of dislocations

SOURCE: Pribery\* i tekhnika eksperimenta, no. 1, 1964, 183-186

TOPIC TAGS: dislocation, crystal imperfection, crystalline structure, germanium, silicon, dislocation density, particle counter, dislocation counter, automatic dislocation counter

ABSTRACT: A statistical analysis of dislocations in Ge and Si sections has revealed that an automatic count has to be based on a differential (dislocation-background contrast) principle. An automatic dislocation counter consists of a tv microscope and a counter proper. A vidicon-tube 300-line 50-frames/sec PTU-OM1 industrial tv outfit is used in the apparatus. The tv camera output, via a forming unit, is applied to counter decades. A monitoring screen with

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ACCESSION NR: AP4018388

brightness and contrast controls is provided. The counting error is under 5%.  
A block diagram of the electronic circuit is described in some detail. "The  
authors wish to thank O. N. Malkov, N. V. Kirilin, V. A. Pronin, and A. I.  
Surakov for alignment of the outfit, and also A. V. Ovodova and L. V. Nabatova  
who took part in the statistical analysis of single-crystal specimens." Orig. art.  
has: 3 figures.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy  
institut redkometallicheskoj promyshlennosti (State Scientific-Research and  
Design Institute of the Rare-Metal Industry)

SUBMITTED: 02Apr63

DATE ACQ: 18Mar64

ENCL: 00

SUB CODE: PH

NO REF SOV: 002

OTHER: 006

Card 2/2

1. "The Role of the State in the Development of the Economy of the USSR". (Dissertation for the degree of Candidate of Economic Sciences, Moscow, 1955).  
2. "The Role of the State in the Development of the Economy of the USSR". (Dissertation for the degree of Candidate of Economic Sciences, Moscow, 1955).  
3. "The Role of the State in the Development of the Economy of the USSR". (Dissertation for the degree of Candidate of Economic Sciences, Moscow, 1955).  
(Dissertation for the degree of Candidate of Economic Sciences, Moscow, 1955)

cc: Telegraph Bureau No. 51, 12 December 1955

SOBOLEV, A. M.

Transformations of phosphorus compounds in ripening flax seeds. A. A. Prokof'ev and A. M. Sobolev (K. A. Timiryazev Inst. Plant Physiol., Moscow). *Doklady Akad. Nauk S.S.S.R.* 109, 817-20(1958).—Examn. of P-contg. fractions isolated from ripening flax seeds showed that the major portion of these during intense formation of fat are not composed of hexosephosphates or glycerophosphates, but of some other O-contg. P compds.; these are unidentified as yet. Fructose diphosphate is absent. While most P compds. were difficultly hydrolyzable with  $N HCl$ , the hydrolyzable fraction may contain adenosinetriphosphate or adenosinediphosphate, which could not be detd. satisfactorily by the Umbreit method (cf. Pavlinova, *C.A.* 46, 9069b). Satisfactory sepn. by paper chromatography of the various P compds. could not be achieved either in basic medium or in  $EtOAc-AcOH-H_2O$ . With  $EtOH-AcOH-H_2O$  at least partial chromatographic sepn. of 5 unidentified P derivs. was attained finally. G. M. Kosolunoff

2



*Sobolev A.M.*

USSR/Plant Physiology. Mineral Nutrition

I-3

Abs Jour : Ref Zhur - Biol., No 7, 1958, No 29397

Author : Prokofiev A.A., ~~Sobolev A.M.~~

Inst : Not Given

Title : On the Translocation of Phosphorus from Leaves in Seeds

Orig Pub : Fiziol. rastenyi, 1957, 4, No 1, 14-23

Abstract :  $\text{Na}_2\text{HP}^{32}\text{O}_4$  was introduced with the aid of vacuum-infiltration into the leaves of the sunflower plant. Radioactive P was found almost only in the basket sector which was under the given leaf. It was determined in short expositions that the predominant portion of  $\text{p}^{32}$  introduced in the leaf followed the trail of the leaf down with a velocity of 2 m/hour.  $\text{p}^{32}$  which was moving from the leaf upward was found first of all in the energetically transpiring parts of the raceme and the upper young seeds. But in the period of intensive fat-accumulation the larger part of P moving to the basket was represented by organic combinations. This work was carried out in the Institute of Plant Physiology of the Academy of Sciences of the Union of Soviet Socialist Republics.

Card : 1/1

*Incl. Plant Physiol. AS USSR*

USSR/Plant Physiology. Respiration and Metabolism

Abs Jour : Ref Zhur - Biol., No 19, 1958, No 36618

Author : Prokof'yev A.A., Zhdanova L.P., and ~~Sobolev A.M.~~

Inst : Institute of Plant Physiology AS USSR

Title : Certain Laws of the Flow of Substances from Leaves Toward the Reproductive Organs

Orig Pub : Fiziol. Rasteniy, 4, No 5, 425-431, 1957

Abstract : 10-20 days after flowering,  $\text{C}^{14}\text{O}_2$  saccharose- $\text{C}^{14}$ ,  $\text{CH}_3\text{C}^{14}$   $\text{OOH}$  and  $\text{Na}_2\text{HP}^{32}\text{O}_4$  were introduced into individual leaves of the "Karlik Stepnoy", "Saratovskiy Ranniy" and "Krasnodarskiy 5956" varieties of leaf mustard and sunflower, through placement of solutions on leaves or their introduction by the vacuum-infiltration method, daily for a period of 5, 10 and 15 days. Also, the leaves were exposed for 20-minute intervals to an atmosphere with  $\text{C}^{14}\text{O}_2$ . In the leaf mustard, the upper-tier leaves proved to be most active in nourishing the fruits and seeds. In the sunflower, regardless of the tier,

Card : 1/2

SOBOLEV, A.M.; VYSKREBENTSEVA, E.I.

Identification of organic acid-soluble phosphorus compounds in  
plants by paper partition chromatography. Fiziol.rast. 6 no.2:  
244-250 Mr-Apr '59. (MIRA 12:5)

1. K.A. Timiryazev Institute of Plant Physiology, U.S.S.R.  
Academy of Sciences, Moscow.

(Plants--Chemical analysis)  
(Phosphorus metabolism)  
(Paper chromatography)

SOBOLEV, A. M. (Moskva)

Distribution, formation and utilization of phytin in higher  
plants. Usp. biol. khim. 4:248-261 '62. (MIRA 15:7)

(PHYTIN)

SOBOLEV, A.M.

Enzymatic hydrolysis of phytin in vitro and in germinating seeds.  
Fiziol. rast. 9 no.3:334-341 '62. (MIRA 15:11)

1. K.A.Timiriazev Institute of Plant Physiology, U.S.S.R. Academy  
of Sciences, Moscow.  
(Phytin) (Phosphatase)

SOBOLEV, A.M.

Paper chromatography of inositol phosphates. Fizio. rast. 9 no.5:  
649-651 '62. (MIRA 15:10)

1. Timiryazev Institute of Plant Physiology, U.S.S.R. Academy of  
Sciences, Moscow.  
(Paper chromatography) (Inositol phosphates)

SOBOLEV, A.M.

Formation and accumulation of phytin in seeds. Fiziol.  
rast. 11 no.1:106-111 Ja-F '64. (MIRA 17:2)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva.

SOBOLEV, A.N.

Territorial ecological schemes as a basis for the coordination of  
the studies of land forms. Nauk zap. L'viv. un. 40:100-102 '57.  
(MIRA 11:6)

1. Institut geografii AN SSSR, Moskva.  
(Botany--Ecology)





SOBOLEV, A.N.

Castings combining several parts. Mashinostroitel' no.3:9  
Mr '60. (MIRA 13:6)  
(Founding)

SOBOLEV, A.N.

Consumption of electric power has been reduced. Mashinostroitel'  
no.2:21 F '62. (MIRA 15:2)  
(Electric furnaces—Technological innovations)

1948, N.Y.

Basic production of skill members of the ... (1st. profm.  
no. 19:27-32 ... (1st. 1948)

SOROLEV, A.N., inzh.

Standardization of technological processes in casting.  
Mashinostroenie no. 2:42-44 Mr-Ap '64. (MIIA 17:5)

L 23338-65 EPR/EWT(m)/EWP(b)/EWA(d)/EWP(t) Ps-4 IJP(c) MJW/JD  
ACCESSION NR: AP5001338 S/0128/64/000/012/0037/0038

AUTHOR: Sobolev, A. N. (Engineer)

TITLE: Serial production of chill-mold castings of AL19 alloy B

SOURCE: Liteynoye proizvodstvo, no. 12, 1964, 37-38 18

TOPIC TAGS: chill mold casting, aluminum alloy, chill mold, aluminum casting/  
alloy AL19 27 14

ABSTRACT: • The chill-mold casting of a part (see Fig. 1 of the Enclosure) and the mold used (Fig. 2 of the Enclosure) are described. The preparation of the alloy used is also discussed. The pouring temperature of  $700 \pm 10^\circ\text{C}$  was determined experimentally and 36-47% of the metal charge was made available by the pouring system. The production rate of the piece described was increased by a factor of 3.5 and samples cut from the castings showed the following mechanical properties:  $\sigma_b = 25.4$  to  $31.8 \text{ kg/mm}^2$  and  $\delta = 6$  to  $8\%$ . "Comrades A. V. Kuz'menko, V. A. Oreshnikova, M. F. Sil'chenko, D. I. Suslov and V. A. Sushkevich also took part in the work." Orig. art. has: 2 figures.

ASSOCIATION: None  
Card 1/4

L 23338-65  
ACCESSION NR: AP5001338

SUBMITTED: 00

ENCL: 02

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Card 2/4

L 23338-65  
ACCESSION NR: AP5001338

ENCLOSURE: 01

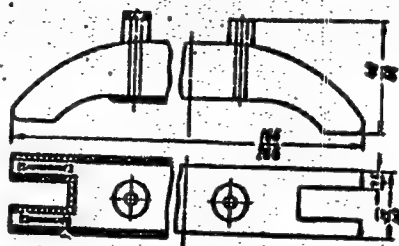


Figure 1. Part chill-mold cast from AL19 alloy.

Card 3/4

L 23338-65  
ACCESSION NR: AP5001338

ENCLOSURE: 02

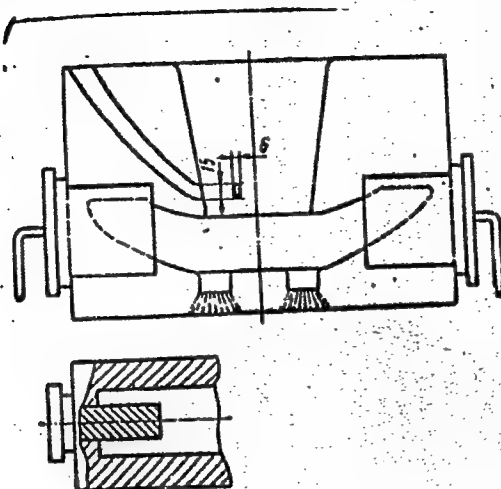


Figure 2. Chill mold for casting AL19 alloy.

Card 4/4



BAKLUSHIN, I.L.; VEK SIN, I.N.; LYULENKOV, V.I.; SABANTSEV, V.P.;  
SOBOLEV, A.P.; SOKOLOV, L.D.; SHIROKOV, V.N.

Analyzing the reserve strength of the 1100 blooming mill  
stand in the Kuznetsk Metallurgical Combine. Izv. vys. ucheb.  
zav.; chern. met. 7 no.2:205-212 '64. (MIRA 17:3)

1. Sibirskiy metallurgicheskiy institut.

BOBOLIV, A. I. and KRAMENETSKO, A. V.

"Soviet Machines for Harvesting Corn Tested", Sel'khoz mashina, No. 4, 1951.

SO: W-1869, 6 Jul 1951

SOBOLEV, A. P.

5656. SOBOLEV, A. P. Zernoubochnyye Kombayny. M., Mashgiz, 1954. 124 s. s. Il'. 20 sm.  
(V Pomoshch' Mekhanizatoram Sek'skogo Khozyaystva). 55,000 Ekz. 2r 20k--Bibliogr. v  
Kontse Knigi.--(55-1013) p.

SO: Knizhnaya, Letopis, Vol. 1, 1955.

Country : USSR  
Category : Soil Science. General Problems.

J

Zh. s.-kh. in-ta, 1956. No. 48572

Author : Sobolov, A.P.  
Institute : Ivanovo Agricultural Institute  
Title : Contribution to the Problem of Studying the Effects of Rotation Crops on Soil Properties

Orig. Sub.: Sb. nauchn. tr. Ivanovsk. s.-kh. in-ta, 1956, No. 14, 23-34

Abstract : Differences in principle are noted in approaches to studying the effects of various crops and their combined influence under the conditions of a particular rotation on soil properties and fertility. This study should not ever be made in complete isolation from the agrotechny of crop cultivation.

Card 1/1

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651820009-9"

Category : Soil Science. Physical and Chemical Properties  
Abs. Contr.: Zh. s.-kh. in-ta, 1956. No. 48616  
Author : Sobolov, A.P.  
Institute : Ivanovo Agricultural Institute  
Title : The Effect of Grass-land Rotation Crops on Soil Structure Dynamic during Vegetation

Orig. Sub.: Sb. nauchn. tr. Ivanovsk. s.-kh. in-ta, 1956, No. 14, 35-49

Abstract : On average podzolic, dusty-argillaceous soil the quantity of water-stable aggregates increases markedly between sowing and harvesting time. Aggregates smaller than 1 mm are formed most intensively under perennial grasses in their third year, from 7.95% in the spring to 34.22% in the fall. Under winter wheat the quantity of aggregates increased from 13.89% in the spring

Card: 1/2

BELOZOR, V.V., inzh.; SOSUNOVA, Ye.M., inzh.; SOBOLEV, A.P., inzh.

Machines used in forage harvesting. Trakt. i sel'khoz mash. no.9:  
24-28 S '58. (MIRA 11:10)

(Forage plants---Harvesting)



KUZNETSOV, G.M.; SOBOLEV, A.S.

Liquidus curves in binary systems of germanium and silicon.  
Isal. splav. tsvet. met. no.4:94-99 '63. (MIRA 16:8)

(Germanium alloys---Thermal properties)  
(Silicon alloys---Thermal properties)  
(Phase rule and equilibrium)

PRO. GIBBY, A.V., L.M.; NOBOLLEV, A.S.

Automatic a.c. balanced bridge for chromatographic recording.  
Trudy BashNII NP no.6:168-171 '63. (MIRA 17:5)

1.14.14, 1.14.15

Chromatographic analysis of products in the production of  
butyl alcohol. Trudy BashNIJ NP no.6:171-178 '63.  
(MIRA 17:5)



KUZNETSOV, G.M.; SOBOLEV, A.S.

Applicability of the Meyer rule in hardness testing. Sbor.  
nauch. trud. GINTSVETMET no.33:263-267 '60. (MIRA 15:3)  
(Hardness--Testing)

37836

S/123/62/000/008/016  
A004/A101

18.8700

AUTHORS: Kuznetsov, G. M., Sobolev, A. S.

TITLE: On the practicability of the Meyer rule during hardness tests

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 8, 1962, 27, abstract  
8A201 ("Sb. nauchn. tr. In-t tsvetn. met. im. M. I. Kalinina",  
1960, v. 33, 263-267)

TEXT: Investigations were carried out to determine the practicability of the Meyer rule:  $P = ad^n$ , where  $P$  - load,  $d$  - indentation diameter,  $a$  and  $n$  - test constants. The hardness was determined at room and elevated temperatures (300, 400, 450 and 500°C) on Pb, Al, Cu, bronze and brass specimens, the indenter impression duration being 0.5, 5 and 50 minutes. It was found that during hardness tests at 20°C and elevated temperatures, a deviation from the Meyer rule is taking place in the range of considerable deformation, i.e.  $n$  is no constant of the given material, but depends on the temperature, holding time and degree of deformation.

[Abstracter's note: Complete translation]

Card 1/1

X

SOBOLEV, Aleksey Semenovich; KAPLAN, G.D. [deceased], red.; BYKOVA,  
M.G., red.; DEYEVA, V.M., tekhn. red.

[Practical manual in agricultural entomology] Praktikum po sel'-  
skokhoziaistvennoi entomologii. Moskva, Gos. izd-vo sel'khoz.  
lit-ry zhurnalov i plakatov, 1961. 325 p. (MIRA 14:8)  
(Entomology)

SOROLEV, A. [S.]  
Academy of Sciences, Estonian SSR, Institute of Animal Husbandry and Vet.  
Medicine.

"Auxilliary method of examination of larynx in cattle."

SO: Vet. 26(8), 1949, p 39

SOBOLEV, A. S.

155T31

USSR/Medicine - Insecticides  
Sanitation

Feb 50

155T31

"Results of Using Preparations of Hexachlorocyclohexane at Pest Enterprises," A. S. Sobolev,  $\frac{1}{2}$  p

"Gig 1 San" No 2

Tests effects of Soviet preparation hexachlorocyclohexane (hexide) on vermin such as lice, bedbugs, fleas, mosquitoes, house flies, and cockroaches in living quarters at a pest enterprise. Other authors have shown hexide to be five, 20, and even 100 times as effective as DDT. Used 150-200 grams per sq m of area of emulsion containing 25 parts hexide, 50 parts

155T31

USSR/Medicine - Insecticides (Contd)

Feb 50

kerosene, 15 parts oil, and 10 parts water. Bedbugs died after 2-3 days, flies and mosquitoes after 1-2 hours, and cockroaches when contacted by emulsion were rendered immobile in 20-30 minutes and died in 1½-2 hours. Bedbugs, fleas, and cockroaches were completely eliminated in the 10,000 cu m of living quarters treated in the test, and fly population was reduced to one third that of control areas.

SOBOLEV, A. [S.]

(From material received by the editor on Diseases of Swine)

3. "Pathogenesis and Prophylaxis of Liver Disease in Pigs" by Senior Science Assistant A. SOBOLEV (Institute of Animal Husbandry and Veterinary Medicine of the Academy of Science of the Estonian SSR). In the pathogenesis of the so-called "liver disease" observed in pigs in the Estonian SSR an important role, in the author's opinion, is played by disturbances in the mineral metabolism in the animal organism, especially a deficiency in the iron, copper, and cobalt involved in liver functions and blood formation. Page 56 (Veterinariya, No. 9, 1952)

SO:

U-5638; 10 March 1954; p. 46;

de g

1. SOBOLEV, A. S.
2. USSR (600)
4. Salt
7. Salt diet of young livestock. Sots.zhiv. 15 No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

SOBOLEV, A.S.

Excretion of chlorides into small intestine of cattle after intravenous injection of hypertonic solution. A. S. Sobolev (Acad. Sci. Estonian S.S.R., Tartu). *Veterinariya* 37, No. 2, 48-9 (1954). The small intestine of cattle acts as a powerful excretory organ for NaCl, as shown by expts. in which NaCl was administered as a hypertonic soln. Intravenously. Excretion and temporary storage of NaCl in the small intestine may explain the detoxicating action of hypertonic solns. in toxic ailments. Intestinal regions beyond the small intestine do not have a NaCl excretory function. G. M. Kosolapoff



YUKHNOVICH, A.N., veter. vrach (Yel'ninskiy rayon, Smolenskoy oblasti);  
 RUDOMETKIN, Ya.S., veter. vrach; EVENTOV, M.Z., veter. vrach;  
 SOBOLEV, A.S., dotsent (Estonskaya SSR); DOL'NIKOV, Yu.Ya., kand.  
 veter. nauk; PALIMPSESTOV, M.A., prof.; SIMONENKO, N.M., dotsent;  
 GONCHAROV, A.P., assistent; BEZRUKOV, A.A.; FROLENKOV, N.A., veter.  
 vrach (Serov, Sverdlovskoy oblasti); KOSHCHHEYEV, P.M.; VOROB'YEV,  
 M.M., kand. veter. nauk; YANCHENKO, P.Kh., veter. vrach;  
 AMELIN, I.P.; BYCHKOV, A.I., kand. veter. nauk; SHVYREV, G.I.,  
 veter. vrach (Stavropol'skiy kray); DANILIN, N.F.; TRUSHIN, A.Z.,  
 veter. vrach; SKRYPNIKOVA, T.K., veter. fel'dsher; MIKHEYEV, A.D.;  
 KARMANOVA, Ye.M., kand. biol. nauk; REMIZOV, Ye.S., mladshiy  
 nauchnyy sotrudnik; ANTIPIN, D.N., referent

From helminthological practice. Veterinariia 38 no.7:55-58  
 JI '61. (MIRA 16:8)

1. Reshetovskiy veterinarnyy uchastok, Novosibirskoy oblasti  
 (for Rudometkin). 2. Sovkhoz "Buda-Koshelevskiy" Gomel'skoy  
 oblasti (for Eventov). 3. Sibirskiy nauchno-issledovatel'skiy  
 veterinarnyy institut (for Dol'nikov). 4. Khar'kovskiy veteri-  
 narnyy institut (for Palimpsestov, Simonenko, Goncharov).  
 5. Blagoveshchenskiy sel'skokhozyaystvennyy institut (for  
 Bezrukov). 6. Novo-Nikolayevskiy veterinarnyy uchastok Krasno-  
 darskogo kraya (for Lochkarev). 7. Karpilovskiy veterinarnyy  
 uchastok Chernigovskoy oblasti (for Ponomarenko). 8. Kamalinskiy  
 veterinarnyy uchastok Krasnoyarskogo kraya (for Koshcheyev).

(Continued on next card)

RACHKOVSKAYA, L.N.; SOBOLEV, A.S.; KOZIK, B.L.

Chromatographic analysis of the oxidation products of  
n-butylenes. Trudy BashNII NP no.7:137-141 '64. (MIRA 17:9)

АВРАМОВ, С.В., ТАТЯНАВНА П.В., КОСЛОВ, С.В., БОЛТОВИЧ, Л.В.

Классификация: СЕКРЕТНО. Дата: 11.07.80. (МЛР 1970)  
500. 01. 005.

SKORYNII, Yuriy Vasil'yevich; SOBOLEV, A.S., nauchn. red.;  
DVORKINA, M., red.

[Reliability and durability of supports of movable  
instrument systems] Nadezhnost' i dolgovechnost' opor  
podvizhnykh sistem priborov. Minsk, Nauka i tekhnika,  
1965. 110 p. (MIRA 19:1)

KURANOVA, P.Z.; LARIONOVA, Ye.S.; PLOTNIKOV, P.M.; PUMPYANSKIY, A.Ya.;  
SOBETS, L.P.; SOBOLEV, A.T.; IL'INSKIY, N.A., spetsred.;  
SHCHERBAKOVA, G.V., red.; TAROV, E.M., tekhn.red.

[Mechanized assembly-line production of sweet rusk; experience  
of the Leningrad Port Mechanical Bakery] Mekhanizirovannoe  
potochnoe proizvodstvo sдобnykh sukharey; opyt Leningradskogo  
Portovogo khlebozavoda. Moskva, Pishchepromizdat, 1956. 31 p.  
(MIRA 11:12)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut  
khlebopekarnoy promyshlennosti.  
(Leningrad--Bakers and bakeries--Equipment and supplies)

SOBOLEV, A.V. (Leningrad)

Changes in electrocardiography in remote periods after total  
or partial excision of the lung. Report No.2. Klin.med. 37  
no.8:67-73 Ag '59. (MIRA 12:11)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta  
ekspertizy trudosposobnosti i trudoustroystva invalidov.  
(PNEUMONECTOMY)  
(ELECTROCARDIOGRAPHY)

30: 1, 1947.

31: 1947, H. J. and de Gles, A. V. "On certain li-  
quid-crystal phases", Journal of Chemical Physics,  
15, 1947, p. 452-55.

32: 1947, 1: August 13, (L. de Gles 'Journal of Chemical Physics', 15, 1947).

SOBOLEV, A.V.

SOBOLEV, A.V., kandidat meditsinskikh nauk; DEYTER, A.I.

Multiple otogenous subdural and intracerebral abscesses. Vest. otorin. 16 no.4:42-46 J1-Ag '54. (MLRA 7:8)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. prof. N.N.Uzol'tsev) Smolenskoy oblastnoy klinicheskoy bol'nitsy.

(BRAIN, abscess,

\*multiple, otogenous)

(ABSCISS,

\*brain, multiple, otogenous)



SOBOLEV, A.V./., BUDNIKOV, N.YE

Engineer

"Tangential bending of welded structures," Avtogen. Delo, No.7, 1949.

SOBOLEV, A.V., inzhener; SITNICHENKO, A.V.

Our experience in founding by means of cast models. Stroil dor. mashinostr.  
1 no.1:34-35 Ja '56. (MIRA 10:1)  
(founding)

SOBOLEV, A.V., inzhener.

Rapid pneumatic grinding machine. Stroil. i dor. mashinostr. 1 no. 2:33  
F '56. (MIRA 10:1)

(Grinding machines)

SOBOLEV, A.V., inzhener; SITNICHENKO, A.I., inzhener.

Increasing the heat resistance of mold boxes and carburizing boxes.  
Strel. i dor.mashinestr. no.7:29-30 J1 '56. (MIRA 9:10)  
(Founding) (Cementation (Metallurgy))

SOBOLEV, B.

Economic and financial aid of the Soviet Union to Asian and  
African countries. Den. 1 kred. 17 no. 12:29-35 D '59.  
(MIRA 12:12)

(Asia--Economic assistance, Russian)  
(Africa--Economic assistance, Russian)

SOBOLEV, B.

Soviet aid to Asian and African countries. Fin. SSSR 38 no.1:33-41  
Ja '64. (MIRA 17:2)

SOBOLEV, B.A.; GOL'DBERG, D.O.

Two-stage deasphaltization of goudrons from sulfur-bearing  
crude oils. Khim. i tekhn. topl. i masel 8 no.5:8-12 My '63.  
(MIRA 16:8)

1. Bashkirskiy nauchno-issledovatel'skiy institut po pere-  
rabotke nefiti, i Ufimskiy neftepererabatyvayushchiy zavod im.  
XXII s"yezda Kommunisticheskoy partii Sovetskogo Soyuza.

AKEMOV, V.S.; SOBOLEV, B.A.; SUSHKO, L.G.

Redistribution of the feed of a solvent and recirculation  
filtrate in the dewaxing of raffinate. Nefteper. i neftekhim.  
(MIRA 17:5)  
no. 4:14-17 '64.

1. Ufimskiy neftepererabatyvayushchiy zavod im. XII s"yezda  
Kommunisticheskoy partii Sovetskogo Soyuza.



L 3903-66 EWT(m)/EPF(c)/T DJ  
ACCESSION NR: AP5023505

UR/0318/65/000/008/0023/0026  
665.546.5.002.235.012.5

43  
40  
B

AUTHOR: Sobolev, B. A.; Nedogrey, P. M.; Tsalik, I. L.

TITLE: Increasing the yield of lubricating oil by means of recovering of secondary raffinate from the extract

SOURCE: Neftepererabotka i neftekhimiya, no. 8, 1965, 23-26

TOPIC TAGS: lubricant refining, lubricating oil, lubricant property, lubricant component, solvent action

ABSTRACT: A method of increasing the yield of automotive lubricating oil from a commercial extract was developed. The 8-10% yield of secondary raffinate (based on deasphalted oil) can be achieved by means of refrigerating the phenol extract 10°C below the lowest operating temperature of the commercial extraction column along with adding 2-10% of fresh phenolated water solvent. When this secondary raffinate is recycled to the extraction column the overall increase in raffinate yield is 4-5%. When the yield of secondary raffinate is kept within 8-10% range there is no detrimental effect on the quality of the total raffinate. For yields

Card 1/2

SOBOLEV, B.I., mayor meditsinskoy sluzhby

Organizing a dysentery section at a garrison hospital. Voen.-med.  
zhur. no.10:74-75 0 '59. (MIRA 13:3)

(DYSENTERY)

(HOSPITALS, MILITARY)

22

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

180 AND 170 ORDERS

Common elements

Common variable index

OPEN

MATERIALS INDEX

ASS. SLA METALLURGICAL LITERATURE CLASSIFICATION

2-2

Determining sulfur in petroleum products by the lamp method. G. I. Chernov and B. N. Sibolev. *Neftevenne Khimicheskoe* 25, No. 9, 55-6(1933).—An app. is described which has the following advantages: (1) a closed container for combustion in the presence of purified air, (2) a device permitting the normal admission of air needed for combustion, (3) combustion of petroleum products in air mixed with O.

A. A. Bochtlingk

CA

PROPERTIES AND PROPERTIES OF  
 Determination of iodine numbers of benzene. B. N. Sobolev and M. A. Golovina. *Chemicheskoe Obozreniye* (U.S.S.R.) No. 4, 5, 1961 (1962). The following Hubl-Waller method was used satisfactorily to det. the I. nos. of benzene. Mix 15-20 g. of benzene with 20 ml.  $\text{CHCl}_3$  and 5-6 ml. of a Hubl-Waller soln. prepd. by mixing 25 g. I. in 500 ml. 96% alc. with 50 g.  $\text{HgCl}_2$  in 500 ml. alc. and adding 50 ml.  $\text{HCl}$  (1:1). Shake the contents, allow to stay in the dark for 1 hr., add 20 ml. of 10% KI soln. and 1-2, 300 ml. distd. water, shake and titrate with 0.1 N  $\text{Na}_2\text{S}_2\text{O}_3$  in the presence of starch. A blank detn. is made with 20 ml.  $\text{CHCl}_3$  and 5-6 ml. of the Hubl-Waller soln. The results agree very closely with those obtained by the standard Hubl method now in use. Results are tabulated. W. Z. Kunch.

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

SOBOLEV, B.N.; KOSTRIKIN, Yu.M., kand.tekhn.nauk; MAN'KINA, N.N., kand.  
tekhn.nauk

Reaction of hydrazine with iron oxides. Teploenergetika 7 no.6:  
92 Je '60. (MIRA 13:8)

1. Vsesoyuznyy teplotekhnicheskiy institut.  
(Hydrazine) (Iron oxides)

MAN'KINA, N.N., kand.tekhn.nauk; SOBOLEV, B.N., teknik

Mechanism of the hydrazine effect on the process of ferric oxide  
scale formation. Teploenergetika 9 no.3:48-50 Mr '62.  
(MIRA 15:2)

1. Vsesoyuznyy teplotekhnicheskii institut.  
(Boilers--Incrustations) (Hydrazine)

1(1)

SOV/5-52-1-3/14

AUTHORS: Sobolev, B. P., Novoselova, A. V.

TITLE: On the Role of Fluoride Compounds in the Transport of Beryllium and the Formation of Phenacite (O roli fluoristykh soyedineniy v perenose berilliya i obrazovanii fenakita)

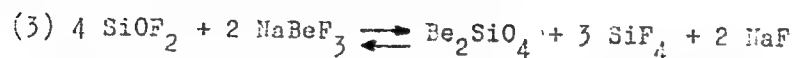
PERIODICAL: Geokhimiya, 1959, Nr 1, pp 20-28 (USSR)

ABSTRACT: The authors synthesized phenacite from beryllium - and silicon oxide. The following materials served as mineralizers: NaF, BeF<sub>2</sub> and the fluoberyllates of alkalis. The latter preparations were supplied by N. S. Tamm and L. M. Mikhayeva. A carefully produced mixture was sealed in quartz ampoules (Figs 2 and 3) and heated in shaft furnaces. The temperature regulators ERM-47 and EPD-17 were used in this process. Experiments at different temperatures and with different mineralizers (Tables 1 to 3) gave the following results: the formation of phenacite from BeO and SiO<sub>2</sub> in the presence of fluoberyllates is a heterogeneous reaction, i.e. via the gaseous state. The authors assume the following mode of formation:  
(1)  $\text{SiO}_2 + 2 \text{NaBeF}_3 \rightleftharpoons \text{SiF}_4 + 2 \text{BeO} + 2 \text{NaF}$

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SOV/7-59-1-3/14

On the Role of Fluoride Compounds in the Transport of Beryllium and the Formation of Phenacite



Because of the transport reactions phenacite can be "over-distilled". The paragenesis of phenacite in the various deposits and the morphological similarity of synthetic and natural crystals (Figs 4 to 7) suggest that fluoberyllates play a leading part in the endogeneous formation of phenacite. The authors express their gratitude to A. A. Beus for reviewing the results. There are 7 figures, 3 tables, and 25 references, 11 of which are Soviet.

ASSOCIATION: Kafedra neorganicheskoy khimii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova ( Chair of Inorganic Chemistry of Moscow State University imeni M.V. Lomonosov)

SUBMITTED: September 24, 1958

Card 2/2



S/078/60/005/010/012/021  
B004/B067

AUTHORS: Sobolev, B. P., Klyagina, I. P.

TITLE: Synthesis and Investigation of Single Crystals of the  
Luminophore  $(\text{Zn,Be})_2\text{SiO}_4$

PERIODICAL: Zhurnal neorganicheskoy khimii. 1960, Vol. 5, No. 10,  
pp. 2294-2299

TEXT: In an earlier paper (Ref. 2), the authors observed and described "transportation effects" in the synthesis of  $\text{Be}_2\text{SiO}_4$  from  $\text{BeO}$  and  $\text{SiO}_2$  by means of fluorine containing mineralizers. Single crystals of  $\text{Be}_2\text{SiO}_4$  were formed from the gaseous phase. The same effect was used in the present work. Single crystals of  $(\text{Zn,Be})_2\text{SiO}_4$  were crystallized from the gaseous phase of the system  $\text{ZnO} - \text{BeO} - \text{SiO}_2$  - mineralizer at  $1200^\circ\text{C}$ . Table 1 gives the results of preliminary experiments made for determining appropriate mineralizers. The synthesis of willemite with the addition of  $\text{NaF}$ ,  $\text{BeF}_2$ , and  $\text{Na}_2\text{BeF}_4$  is studied, and the latter compound was found to be suited for further experiments. A mixture of  $\text{ZnO}$  and  $\text{BeO}$  at a molar ratio

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Synthesis and Investigation of Single Crystals  
of the Luminophore  $(\text{Zn,Be})_2\text{SiO}_4$

S/078/60/005/010/012/021  
B004/B067

of 0.5 : 1 to 3 : 1 as well as of  $\text{SiO}_2$  and 3 - 5%  $\text{Na}_2\text{BeF}_4$  were heated to 1200°C (Table 2). A reaction mass and a "sublimate" were formed, which at distances from 5 - 8 cm formed up to 6 mm long single crystals on the cold walls of the quartz ampoule (Fig.). The reaction products were studied by optical crystal and X-ray photographic methods. The reaction mass consisted of two crystalline phases differing in their refractive indices. The phase with the smaller refractive index could be identified as phenacite, that with the higher one as a solid solution:  $(\text{Zn,Be})_2\text{SiO}_4$ , which crystallized in willemite structure. A comparison was made between natural willemite supplied by the Mineralogicheskiy muzey Akademii nauk SSSR (Mineralogical Museum of the Academy of Sciences USSR) and willemite synthesized from  $\text{ZnO}$  and  $\text{SiO}_2$ . The composition of the "sublimate" depended on the ratio  $\text{ZnO} : \text{BeO}$ . Phenacite was formed at  $\text{ZnO} : \text{BeO} = 0.5 : 1$  to 2 : 1. At  $\text{ZnO} : \text{BeO} = 3 : 1$ , the crystals consisted of  $(\text{Zn,Be})_2\text{SiO}_4$ . Table 3 gives the roentgenographically determined lattice constants. The values  $a_0 = 13.80 \text{ kX}$ ,  $c_0 = 9.24 \text{ kX}$  were obtained for the unit cell. Willemite synthesized from  $\text{ZnO}$  and  $\text{SiO}_2$  had the values  $a_0 = 13.92 \text{ kX}$ ,

Card 2/3

SOBOLEV, B.P.

Experimental study of geochemical conditions in the formation  
of beryllium containing willemite. Trudy IMGRE no.7:79-82 :61.  
(MIRA 16:11)

S/078/61/006/001/014/019  
B017/B054

AUTHORS: Novoselova, A. V., Babin, V. N., Sobolev, B. P.  
TITLE: Synthesis of Monocrystal Luminophores  $\text{Zn}_2\text{SiO}_4/\text{Mn}$  and  $(\text{Zn}, \text{Be})_2\text{SiO}_4/\text{Mn}$   
PERIODICAL: Zhurnal neorganicheskoy khimii, 1961, Vol. 6, No. 1, pp. 227 - 228

TEXT: The authors developed a new method of synthesizing monocrystals of the luminophores  $(\text{Zn}, \text{Be})_2\text{SiO}_4/\text{Mn}$  and  $\text{Zn}_2\text{SiO}_4/\text{Mn}$ . Silicon, beryllium, and zinc oxides were used as initial materials, and lithium zinc fluoride as mineralizer. Manganese in the form of  $\text{MnF}_2$  was added as activating component. The component ratio of  $\text{ZnO} : \text{BeO} : \text{SiO}_2$  was 3 : 1 : 2. The mineralizer  $\text{LiZnF}_3$  was added in an amount of 5%, and the activator  $\text{MnF}_2$  in an amount of 1% (% by weight of the oxide mixture). The monocrystals were investigated by their luminescence and by X-ray analyses. Fig. 1 shows the luminescence spectra taken with the УФС-2 (UFS-2) ultraviolet filter of Card 1/2